

# Factors Related to The Compliance of Medan Johor Public Health Center Hajj Pilgrimages in Returning The Health Alert Cards of 2024 Hajj Pilgrimages

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## ABSTRACT

**Background:** The Hajj pilgrimage is an obligation for Muslims, as established in Constitution Number 8 of 2019. One of the important components in the organisation of the Hajj is health, especially due to the high proportion of elderly and chronically ill congregants, who are considered a high-risk group. The Hajj Pilgrim Health Alert Card (K3JH) is issued to detect infectious diseases early after the congregation returns home. However, the rate of K3JH returns in Medan City has not yet reached the target of 90%.

**Methods:** This study employed a cross-sectional design and was conducted at the Medan Johor Health Centre in 2024. The research sample consisted of all Hajj pilgrims registered in the work area. Data were collected through questionnaires and documents monitoring K3JH returns. The variables analysed included age, gender, education, occupation, distance to health facilities, disease status, information received, and the mechanism of K3JH return. Data analysis was performed using chi-square tests and logistic regression.

**Results:** The majority of congregants who did not return their K3JH cards were elderly individuals with accompanying diseases. The main reasons for not returning the K3JH were forgetfulness, loss of the card, and lack of communication. Significant factors associated with K3JH return included age, education, disease status, and access to health services.

**Conclusion:** Compliance among pilgrims in returning the K3JH is influenced by both individual and systemic factors. There is a need for targeted education, effective communication strategies, and strengthened coordination between health centres and KBIHU to increase the rate of K3JH returns. The results of this research have important implications for community health policy and the prevention of infectious diseases among Hajj pilgrims.

## BACKGROUND

The Hajj pilgrimage stands as one of the largest and most significant religious gatherings in the world, drawing millions of Muslims from diverse backgrounds and nationalities each year. This monumental event, which takes place in the holy city of Mecca, Saudi Arabia, is not merely a religious obligation but a profound spiritual journey that encapsulates the essence of Islamic faith. In 2023, Indonesia, as the largest sending country for Hajj pilgrims, recorded an impressive departure of over 221,000 congregants. Notably, a substantial 44% of these pilgrims fell into the category of senior citizens, highlighting the demographic diversity and the unique challenges faced by this group.

In Medan City, the statistics reveal that out of the total 2,354 pilgrims, a staggering 63.59% are classified as high-risk individuals. This categorisation is primarily due to factors such as advanced age and pre-existing health conditions, which significantly heighten their vulnerability during the pilgrimage. The prominence of older pilgrims within the Hajj demographic not only underscores the

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cultural significance of this journey for the elderly but also raises critical public health concerns. The potential for infectious disease transmission during such a large-scale event is a pressing issue, particularly in light of recent global health crises.

The high proportion of at-risk congregants significantly amplifies the potential for the transmission of infectious diseases, including COVID-19, MERS-CoV, meningitis, and other infectious illnesses. The risk escalates particularly during the return journey, where pilgrims, having interacted with millions of individuals in the densely populated environment of Saudi Arabia, may inadvertently carry pathogens back to their home countries. This scenario necessitates a robust public health response to mitigate any potential outbreaks that could arise from the pilgrimage.

To address these public health challenges, the Ministry of Health of the Republic of Indonesia has implemented the Hajj Pilgrim Health Alert Card (K3JH). This initiative serves as a crucial tool for early detection of contagious diseases and aims to enhance the overall vigilance of health monitoring among pilgrims. The K3JH is mandatory for all pilgrims and requires them to report back to health centres within 14 days of their return. This system is designed to facilitate the identification of any health issues that may have arisen during the pilgrimage, thereby allowing for timely intervention and treatment.

Despite the importance of the K3JH, the compliance rate among pilgrims has been disappointingly low, falling far short of the target of 90%. In Medan City, the achievement for 2023 was only 57%, indicating a significant gap in adherence to essential health procedures that are critical for early vigilance and prevention of extraordinary health events. This shortfall raises important questions about the factors influencing compliance among pilgrims.

Several elements appear to play a role in this compliance gap. Firstly, age is a significant factor; older pilgrims may struggle with the logistics of completing the K3JH process due to mobility issues or a lack of understanding of the requirements. Secondly, educational background can influence a pilgrim's awareness and understanding of the importance of health monitoring. Those with lower educational attainment may not fully grasp the implications of failing to report health issues post-pilgrimage. Additionally, the distance to health facilities can pose a logistical challenge, particularly for those living in remote areas where access to healthcare services is limited. Lastly, the quality and clarity of the information provided to pilgrims before and during the Hajj can significantly affect their compliance levels. If the messaging is unclear or insufficiently disseminated, it is likely that many pilgrims will not engage with the health monitoring process as intended.

The interplay of these factors highlights the need for a multifaceted approach to improve compliance with health monitoring protocols among Hajj pilgrims. Enhanced educational campaigns that target both the pilgrims and their families could play a pivotal role in raising awareness about the importance of the K3JH. Moreover, simplifying the reporting process and ensuring that health facilities are accessible to all pilgrims, regardless of their geographical location, would likely improve compliance rates.

The Hajj pilgrimage represents not only a significant religious event but also a complex public health challenge, particularly for countries like Indonesia that send large numbers of pilgrims. The high proportion of at-risk individuals among the congregants necessitates a proactive approach to health monitoring and disease prevention. While initiatives such as the K3JH are crucial for safeguarding public health, the current compliance rates indicate a pressing need for improved education, accessibility, and communication strategies. By addressing these challenges, we can enhance the health outcomes of pilgrims and ensure that the spiritual journey of Hajj remains a safe and fulfilling experience for all participants. The collective responsibility of health authorities, community leaders, and the pilgrims themselves is vital in bridging the gap between intention and action, ultimately fostering a healthier environment for future generations of pilgrims.

## METHODS

This study employs a case-control design to analyse the factors that influence the compliance of pilgrims in returning to K3JH. The sample consists of 110 Hajj pilgrims, with 55 pilgrims in the case group (those returning to K3JH) and 55 pilgrims in the control group (those not returning to K3JH). The participants were randomly selected from the Medan Johor Health Centre in 2023. The research is ongoing from September 2023 to February 2024. Quantitative data were obtained through medical records and Siskohatkes, while qualitative data were gathered through in-depth interviews with eight informants: four pilgrims, two health officers, and two KBIHU leaders. The interviews aimed to explore the reasons for compliance or non-compliance with the K3JH return.

Quantitative analysis will employ the chi-square test to assess the relationship between variables, with a significance level set at 0.05, and will calculate the odds ratio (OR). Qualitative analysis will utilise thematic analysis to identify the main themes from the interviews. The research process includes preparation (research permission and ethical approval), data collection (interviews and medical record data), data processing (using SPSS), and presentation of results (tables, graphs, and descriptive summaries).

This study has received approval from the ethics committee, and all participants have provided written consent. Data confidentiality will be maintained, and participant identities will be anonymised.

## RESULTS

### Univariate Analysis

Univariate analysis aiming For presenting variable data in form distribution frequency, including variable like age, type gender, education, knowledge, distance health center to House respondents, risk diagnosis high and non- risk high, and compliance in return K3JH to health center. Data collected from Health and Social Security System Medan Johor Health Center 2023 presented in table For make it easier understanding and interpretation to variables studied. Full results can seen in the table following :

#### a. Distribution Age

Table 1. Distribution Age in Compliance Returning the Health Alert Cards of 2023 Hajj Pilgrims

Age	n	(%)
Mature	88	80.0
Elderly	22	20.0
Total	110	100.0

In Table 1, it can be seen that Of the 110 respondents, 88 respondents (80.0%) were included in group age adults (<60 years ), while 22 respondents (20.0%) were in the group age elderly (≥60 years ). With Thus, it can concluded that majority Respondent is at in group age mature.

#### b. Gender Distribution

Table 2. Gender Distribution in Compliance Returning the Health Alert Cards of 2023 Hajj Pilgrims

Gender	n	(%)
Man	44	40
Woman	66	60
Total	110	100

Of the 110 respondents, 44 people (40.0%) were of the same sex. sex male and as many as 66 people (60.0%) were of the same sex sex women. So that can concluded that part big Respondent various sex Woman.

#### c. Distribution of Education

Table 3. Distribution of Education in Compliance Returning the Health Alert Cards of 2023 Hajj Pilgrims

Education	n	(%)
Low	95	86.4
Tall	15	13.6
Total	110	100.0

Based on Table 3 can As seen, 95 respondents (86.4%) were educated low, and as many as 15 respondents (13.6%) were educated high. So can concluded that part big Respondent educated tall.

#### d. Distribution Work

Table 4. Distribution Work in Compliance Returning the Health Alert Cards of 2023 Hajj Pilgrims

Work	n	(%)
Government employees	48	43.6
Self-employed	15	13.6
Not Working/Housewife	47	42.7
Total	110	100.0

From the table the can seen, as many as as many as 48 respondents (43.6%) work as Of the employees, 15 respondents (13.6%) worked as Self-employed and as many as 47 respondents (42.7%) did not Work or as a housewife. So that can concluded that part big respondents not working / housewives.

## e. Distance Distribution

Table 5. Distance Distribution in Compliance Returning the Health Alert Cards of 2023 Hajj Pilgrims

Distance	n	(%)
Near	41	37.3
Currently	59	53.6
Far	10	9.1
Total	110	100.0

From the table the can seen as many as 41 respondents (37.3%) with distance close, as many as 59 respondents (53.6%) took with moderate distance and as many as 10 respondents (9.1%) took it long distance. So that can concluded that part big Respondent to go through with moderate distance.

## f. Distribution of Diagnosis

Table 6. Distribution of Diagnosis in Compliance in Returning Health Alert Cards for Hajj Pilgrims in 2023

Diagnosis	n	(%)
Non Resti	35	31.8
Resti due to elderly and/or comorbidities	75	68.2
Total	110	100.0

From the table above can seen as many as 35 respondents (31.8%) with non resti diagnosis, and as many as 75 respondents (68.2%) with diagnosis rest Because elderly and or comorbid. So that can concluded that part big Respondent with diagnosis rest Because carry on age and or comorbid.

## 2. Bivariate Analysis

Research purposes This is For identify connection between variable independent and variable dependent. Variable independent analyzed covering age, type gender, education, occupation, distance health center with House respondents, as well as non- risk and risk diagnoses, while variable dependents studied is compliance return K3JH to Medan Johor Health Center. Analysis done using the Chi-Square test with level 95% confidence ( $\alpha = 0.05$ ) for test the hypothesis proposed.

Table 7. Compliance of Hajj Pilgrims in Returning the Hajj Pilgrims' Health Alert Cards to Medan Johor Health Center

	Compliance		
	Obedient n %	Not obey n %	Total n %
Hajj Pilgrims	64 30.5	146 69.5	110 100.06

## a. Relationship Age with with Compliance in Return Card (K3JH) to Medan Johor Health Center

Table 8. Connection Age with Compliance in Returning K3JH to Medan Johor Health Center

Age	Compliance			p -value	OR	95% CI
	Obedient n %	Not obey n %	Total n %			
Mature	21 19.1	31 28.2	52 47.3	0.165	0.530	0.241-1.166
Elderly	34 30.9	24 21.8	58 52.7			
Total	55 50.0	55 50.0	110 100.0			

Analysis results show No There is connection between age with compliance returning K3JH to Medan Johor Health Center, where Continuity Correction statistical test results were obtained with p -value = 0.165. The p-value is  $0.165 > 0.05$ , which means that  $H_0$  is accepted,  $H_a$  is rejected means No There is connection age with compliance return K3JH to Medan Johor Health Center

b. Relationship between the sexes with with Compliance in Return Card (K3JH) to Medan Johor Health Center

Table 9. Connection between the sexes with Compliance Returning K3JH to Medan Johor Health Center

Gender	Compliance			<i>p</i> -value	OR	95% CI
	Obedient n %	Not obey n %	Total n %			
Man	25 22.7	19 17.3	44 40.0	0.330	1,579	0.732-3.405
Woman	30 27.3	36 32.7	66 60.0			
Total	55 50.0	55 50.0	110 100.0			

From the table above can seen results analysis No There is connection between type sex with compliance returning K3JH to Medan Johor Health Center, where Continuity Correction statistical test results were obtained *p* value = 0.330. If the *p* value > 0.05 then can concluded that *H*<sub>0</sub> is accepted, *H*<sub>a</sub> is rejected means No There is connection between type sex with compliance return K3JH.

c. Relationship between Education and Compliance in Return Card (K3JH) to Medan Johor Health Center

Table 10. Connection between Education and Compliance in Returning K3JH to Medan Johor Health Center

Education	Compliance			<i>p</i> -value	OR	95% CI
	Obedient n %	Not obey n %	Total n %			
Tall	49 44.5	46 41.8	95 86.4	0.578	0.626	0.207-1.896
Low	6 5.5	9 8.2	15 13.6			
Total	55 50.0	55 50.0	110 100.0			

Analysis results show No There is connection between education with compliance returning K3JH to Medan Johor Health Center, where Continuity Correction statistical test results were obtained with *p* value = 0.578. If the *p* value > 0.05, which means that *H*<sub>0</sub> is accepted, *H*<sub>a</sub> is rejected means No There is connection education with compliance return K3JH to Medan Johor Health Center.

d. Relationship Work with Compliance in Return Card (K3JH) to Medan Johor Health Center

Table 11. Connection between Work with Compliance Returning K3JH to Medan Johor Health Center

Work	Compliance			<i>p</i> -value
	Obedient n %	Not obey n %	Total n %	
Employee	17 15.4	31 17.3	48 43.6	0,000
Self-employed	15 13.6	0 0	15 13.6	
Not Working/Housewife	23 21.0	24 21.8	47 42.7	
Total	55 50.0	55 50.0	110 100.0	

From the table above can seen results analysis that There is connection between work with compliance return K3JH to Medan Johor Health Center, statistical test results obtained *p* value = 0.001 < 0.05 then can concluded that *H*<sub>0</sub> is rejected and *H*<sub>a</sub> is accepted means There is connection work with compliance return K3JH.

e. Distance Relationship of Health Centers with Compliance in Returning K3JH to Medan Johor Health Center

Table 12. Connection between distance health center with House Respondent with compliance return K3JH to Medan Johor Health Center

Distance	Compliance			<i>p</i> -value
	Obedient n %	Not obey n %	Total n %	
Near	28 25.5	13 11.8	41 37.3	0.009
Currently	24 21.8	34 30.9	58 52.7	
Far	3 2.7	8 7.3	11 10.0	
Total	55 50.0	55 50.0	110 100.0	



From the table above, we can see the results of the analysis of the relationship between the distance of the health center and the respondent's home and compliance in returning K3JH to Medan Johor Health Center. The statistical test results obtained a  $p$  value = 0.009. The  $p$  value < 0.05, it can be concluded that  $H_0$  is rejected and  $H_a$  is accepted, meaning there is a relationship between the distance of the health center and the respondent's house with compliance in returning K3JH.

f. Relationship between Non-Resti and Resti Diagnosis with Compliance in Returning K3JH to Medan Johor Health Center

Table 13. Connection between Non Resti and Resti Diagnosis with Compliance Returning K3JH to Medan Johor Health Center

Diagnosis	Compliance			$p$ -value	OR	95% CI
	Obedient n %	Not obey n %	Total n %			
Non Resti	13 11.8	22 20.9	35 31.8	0.101	0.464	0.204-1.058
Resty	42 38.2	33 29.1	75 68.2			
Total	55 50.0	55 50.0	110 100.0			

From the table above, the results of the analysis can be seen that There is no relationship between the diagnosis of non-high-risk and high-risk diseases and compliance with returning K3JH to Medan Johor Health Center. The results of the Continuity Correction statistical test obtained a  $p$  value = 0.101. The  $p$  value > 0.05, it can be concluded that  $H_0$  is accepted and  $H_a$  is rejected, meaning there is no relationship between the diagnosis of non-high-risk or non-high-risk diseases and compliance with returning K3JH.

Bivariate Selection :

Variables	$p$ value
Age	0.165
Gender	0.330
Education	0.578
Work	0.001
Distance	0.009
Diagnosis	0.106

Selection results bivariate found that variable age ( $p = 0.165$ ), type gender ( $p = 0.330$ ), education ( $p = 0.578$ ), occupation ( $p < 0.001$ ), distance ( $p = 0.009$ ), and diagnosis ( $p = 0.101$ ). If we look at from job variable with  $p = 0.001$  and distance with  $p = 0.009$ , the most related are job and distance because under the  $p$  condition < 0.05.

### 3. Research Informants

Informant in study This There were 2 Hajj pilgrims who returned K3JH, 2 people who didn't return K3JH, 2 officers health center consists of from doctors and officers Siskohatkes (administration) and 2 KBIHU leaders.

#### a. Obedient Hajj Pilgrims Informants

No.	Name	Age	Gender	Education	Work	Distance	Diagnosis
1	Informant 1	39	Pr	S2	civil servant	Near	Not high risk
2	Informant 2	23	Lk	High School	Student	Currently	Not high risk

Based on results interview, it is known that obedient informant in returning the Hajj Pilgrim Health Card (K3JH) in general aged adults, consisting of from man and also women, have background behind education high, good working and also No work, and stay with distance relatively small health center near until moderate, and not own risk tall disease.

Second informant confess to obtain information about K3JH return from officer health center, good through WhatsApp groups and in a way directly, and state that they informed For check it out health If experience the symptoms listed in K3JH. Information about obligation K3JH returns are also obtained through media such as WA group for health centers and when was in the Hajj dormitory. However, both informant 1 and informant 2 stated that they No accept information from Group Guidance for Hajj and Umrah Pilgrimage (KBIHU) related K3JH return.

Motivation informant For returning K3JH varies, starting from from compliance to Instructions officer until Because feel healthy and not experience disturbance health after the Hajj. Regarding incident post

-hajj, informant give different answers ; informant 1 did not know existence sick congregation, while informant 2 knows existence congregation who experienced shortness of breath to treated in Mecca and undergo isolation independent after arrived in the homeland.

As a suggestion for increase compliance K3JH return, informant suggested that a list be made of the congregation who had and had not return K3JH and improvement intensity information through communication media like WA group, and education more carry on about the function and importance of K3JH.

#### b. Disobedient Hajj Pilgrim Informants

No.	Name	Age	Gender	Education	Work	Distance	Diagnosis
1	Informant 3	52	Pr	S1	housewife	Currently	Not high risk
2	Informant 4	52	Lk	High School	Private	Currently	Not high risk

Based on results interview with informant who is not returning the Hajj Pilgrim Health Card (K3JH), it is known that they aged adults, consisting of from men and women, have education high, some No working (housewife) and some other Work as self-employed, and stay at a distance currently from health center and not own risk tall disease. Both informant state accept information regarding K3JH, both from officer health center and KBIHU, and mentions that information delivered via WhatsApp media, including WA group for health centers and KBIHU Pemprovsu. However, there are difference in information received related recommendation For check it out self to health center if experience K3JH symptoms— one informant state there is, whereas other to mention No There is.

Second The informant also stated that KBIHU provides information about obligation K3JH return. Although Thus, they choose For No return it with different reasons. Informant 3 felt disappointed to service health while in Saudi Arabia because No served with Good moment need medicine, and feel No need return to health center after homecoming Because must quick traveling go out city. While that, informant 4 considered that because the pilgrimage has been finished and not There is sanctions on non-compliance, then return card No considered important. Second The informant also stated No know existence sick pilgrims or undergo isolation independent after returning home from land holy.

As a suggestion, the informant suggest that the service health while in Saudi Arabia was improved For push compliance congregation, and socialization about the importance of K3JH being carried out more early for the congregation more understand its function.

#### c. Informant Officer

No.	Name	Age	Gender	Education	Work
1	Informant 5	50	Pr	S2	Community Health Center Doctor
2	Informant 6	35	Pr	D3	Health Center Health System Officer

Based on interview with informant officer, namely doctors and officers Siskohatkes which also doubles as analyst laboratory, it is known that information regarding the Hajj Pilgrim Health Card (K3JH) has delivered in a way active to congregation. Second officer state that information regarding K3JH is given moment meningitis vaccination and approaching Hajj departure. They also deliver that congregation appealed For check it out self to health center If experience symptoms listed on K3JH, as well notified that K3JH must returned to health center in 14 days time after homecoming, although No experience complaint health.

Delivery information done through various media, including WhatsApp group for health centers and congregations, messages personal, and even calling telephone directly. Information similar has also been delivered to KBIHU leaders to be able to continue appeal the to group their respective congregations. However Thus, based on information officers, some reasons given congregation on non-compliance in K3JH returns include, among others : the disappearance card, forgot place save, and No Again respond communication from officer.

In addition, both informant state that there is congregation who experienced disturbance health in the form of cough and flu more from 14 days after homecoming from the pilgrimage, and one informant to mention existence the congregation who undergo isolation independent, even though type his illness No known in a way sure. Findings This indicates importance monitoring health post -hajj and the need strengthening communication and education to congregation for obedience to K3JH returns increased.

## d. Informant KBIHU Leader

No.	Name	Age	Gender	Education	Work
1	Informant 7	53	Lk	S1	Head of KBIHU Al Abidin
2	Informant 8	42	Pr	S1	Head of KBIHU An Nuur

Based on interviews with informants from KBIHU, specifically the leader of a guidance group that oversees more than 100 congregations, information was obtained regarding the role of KBIHU in educating pilgrims about health. In the guidance sessions, topics presented included the importance of maintaining health, vitamin consumption, carrying medical supplies, and explanations about conditions in Saudi Arabia. However, there are differences in the delivery of information regarding K3JH; one informant confessed that no information was conveyed about monitoring symptoms according to K3JH, while others stated that the information had been delivered.

When asked about the congregation's response to the K3JH appeal upon their return, the second informant mentioned that some members of the congregation responded positively, but others did not provide any response. Regarding health conditions post-return, one informant mentioned the existence of a congregation member who experienced a mild stroke more than 14 days after returning to their homeland, while another informant did not have any information on this matter.

From the informants' perspective, K3JH is assessed as an important tool for the early detection of health issues among the congregation; however, the congregation's understanding of the function and use of K3JH is still low. As a suggestion to increase the effectiveness of K3JH upon return, one informant suggested that the distribution of K3JH cards should not be done at the moment of return to the Hajj dormitory, as the congregation is often in a hurry to go home. Meanwhile, another informant emphasised the need to improve the congregation's awareness of the importance of the return card.

## DISCUSSION

### Connection Age with Compliance Returning K3JH

Analysis results show No there is connection significant between age with compliance restore K3JH ( $p = 0.165$ ). Findings This in line with research by Abdul Latif (2021) and Liberty (2017), however depart behind with studies Widy Astuti et al. (2023) and Pangesti (2021) who found existence connection significant between age and compliance.

### Sex Relations with Compliance Returning K3JH

Study This show No There is significant relationship between type gender and compliance ( $p = 0.330$ ), although amount Respondent Woman more many. This result consistent with studies Pangesti (2021) and Liberty (2017), which show type sex No determinant main in behavior compliance congregation.

### Relationship of Education with Compliance Returning K3JH

Not found connection between level education with compliance restore K3JH ( $p = 0.578$ ). Although some big Respondent educated high, no there is difference significant in compliance. This result consistent with study Widy Astuti et al. (2023) and Dedi Apriadi (2021), however contradictory with Pangesti (2021) found it existence influence significant education to compliance.

### Connection Work with Compliance Returning K3JH

Found connection significant between work and compliance ( $p = 0.001$ ). Respondents self-employed show greater compliance tall compared to employee, allegedly Because flexibility time. This result in line with Badahdah (2019), however different from studies Pangesti (2021) which is not find connection similar.

### Distance Relationship with Compliance Returning K3JH

The results show existence connection significant between distance place residence and compliance ( $p = 0.010$ ), where the congregation lives more near with health center more obedient. Findings This supported by research by Giok Beginner (2021) which also found influence distance to compliance.

### Relationship of Diagnosis with Compliance Returning K3JH

There is no connection significant between diagnostic status ( risk ) high vs. non- risk ) with compliance ( $p = 0.106$ ). This result in accordance with Liberty's findings (2017) also stated that health status No influence compliance return K3JH.



### Analysis of Informant

Among the 210 hajj pilgrims examined at the Medan Johor Health Centre, only 64 individuals (30.47%) returned the Hajj Pilgrim Health Alert Card (K3JH), while 146 individuals (69.52%) did not. Generally, compliant congregants obtain information from the health centre, WhatsApp groups, or during the distribution of K3JH in the dormitory; some also cite that information is sourced from KBIHU, although there are instances where individuals do not receive information directly. The primary reason for returning the card is a sense of good health and adherence to guidelines. Some congregants who returned the K3JH experienced health disturbances, such as shortness of breath upon admission, but the subsequent developments remain unclear. One congregant suggested that the socialisation of K3JH should be more intensive, and that the return list should be shared within WhatsApp groups. Conversely, those who did not return the K3JH acknowledged receiving information but cited reasons such as disappointment with health services in Saudi Arabia, loss or forgetfulness regarding the card, a lack of penalties, or a belief that their obligations were fulfilled after completing the hajj. Health centre officials conveyed information regarding K3JH, including meningitis vaccinations and reminders as departure approached, through WhatsApp groups, private chats, and phone calls. According to the officers' records, there were no cases of serious illness post-hajj, although some individuals did undergo independent isolation due to symptoms of cough and fever. The head of KBIHU reported that the appeal for K3JH returns has been communicated to members, but monitoring of compliance remains limited as the focus of guidance has been more on maintaining health during worship. Records from the health centre indicate that a number of congregants sought medical treatment more than 14 days after returning, both among those who returned the K3JH and those who did not. Here details pilgrims visiting to health center after go home from Saudi Arabia:

No	Respondents	Complaint	Visiting Day
1	A	Cough	H+19
2	B	Respiratory problems since the beginning of departure	H+20
3	C	Control, because post op colon	H+23
4	D	Treatment for hypertension	H+37
5	E	Prostate disorders	H+23
6	F	Continuing treatment, diabetes	H+21

From the table above noted that No There is pilgrims who experience worrying illness or allegedly experience disease infectious after return to homeland.

### CONCLUSION

Based on results research, some factor affecting compliance Medan Johor Community Health Center Hajj pilgrims in returning the Hajj Pilgrims Health Alert Card (K3JH) found No relate with age, type gender, education, and diagnosis risk tall or low. However, the factor work and distance health center with House Respondent proven own significant relationship with compliance in return card. Dominant factors that influence compliance is work and distance. Although the pilgrims have return from the pilgrimage, things This No ensure level high compliance and discipline, proven only 30.47% of the congregation returned K3JH.

### CONFLICTS OF INTEREST

The authors declare that they have no conflict of interest.

### REFERENCES

- Abdul Rahman, Y. (2021). Mass Covid-19 Vaccination as a Community Effort to Implement Legal Compliance (Obedience Law). *Khazanah Hukum*, 3(2), 80–86. <https://doi.org/10.15575/kh.v3i2.11520>
- Aditya, & Milkhatun. (2020). The relationship between knowledge of meningitis vaccination and family support on compliance with meningitis vaccination of Umrah pilgrims at the Class II Samarinda Port Health Office. *Borneo Student Research*, 1(3), 1625–1640.
- Adliyani, Z., Angraini, D., & Soleha, T. (2017). The influence of knowledge, education and economy on clean and healthy living behavior in the community of Pekonmon Village, Ngambur District, Pesisir Barat Regency. *Journal of Medicine, University of Lampung*, 7(1), 6–7. <https://juku.kedokteran.unila.ac.id/index.php/majority/article/download/1733/1691>

- Anggraini, M. P. (2017). Overview of the Early Warning Alert Response System (Ewars) Performance of Health Centers at the Trenggalek Regency Health Office in 2016. *Periodic Journal of Epidemiology*, 5(3), 276–285. <https://doi.org/10.20473/jbe.v5i3.2017>.
- Apriadi, D. (2021). Analysis of factors for participation in hepatitis “B” screening in pregnant women. *SAGO Journal of Nutrition and Health*, 3(1), 51–61. <https://doi.org/10.30867/gikes.v3i1.717>
- Arbiyan, P, R. I., Anwari, A., & Muhsi, M. (2023). Analysis of Health Facility Coverage (PUSKESMAS) Based on Geographic Information System (Case Study: Pamekasan District). *Jurnal Minfo Polgan*, 12(1), 514–522. <https://doi.org/10.33395/jmp.v12i1.12450>
- Astuti, W., Badriah, D. L., Mamlukah, M., & Iswarawanti, D. N. (2023). Analysis of Factors Related to Compliance with Meningitis Vaccination Time for Umrah Pilgrims at the Port Health Office in the Cirebon Working Area 2023. 04(1), 227–234. <https://doi.org/10.34305/jphi.v4i01.932>
- Badahdah, A. M., Alghabban, F., Falemban, W., & Albishri, A. (2019). Meningococcal Vaccine for Hajj Pilgrims: Compliance, Predictors, and Barriers. 4, 127. <https://doi.org/10.3390/tropicalmed4040127>
- Crie Handini, M. (2022). Research Methodology for Beginners. Sari Mutiara University of Indonesia.
- DPR. (1984). Law Number 4 of 1984. In Minister of Health of the Republic of Indonesia.
- Eka Putri, F. (2019). Analysis of the Failure of Guinea, Liberia, and Sierra Leone in Containing the Ebola Outbreak in 2014.
- Fathimah, A. F., Al-Islami, M. F., Gustriani, T., Rahmi, H. A., Gunawan, I., Agung, I. M., & Husni, D. (2021). Public Compliance to the Government During the Pandemic: An Exploratory Study Using an Indigenous Psychology Approach. *Psikobuletin:Scientific Psychology Bulletin*, 2(1), 15. <https://doi.org/10.24014/pib.v2i1.11703>
- Hananto, D. T., Sampurna, B., & Kekalih, A. (2022). Acceptance of Electronic Health Alert Card (E-Hac) for Covid-19 Screening Among Flight Passengers at Soekarno – Hatta Airport. 248–254. <https://doi.org/10.26911/icphepidemiology.fp.08.2021.01>
- Herlina, H. (2021). Health Services for Hajj Pilgrims in Deli Serdang Regency. *Jurnal Persada Husada Indonesia*, 8(28), 29–35. <https://doi.org/10.56014/jphi.v8i28.314>
- Irwan. (2017). *Epidemiology of Infectious Diseases*. CV Absolute Media.
- Jayanti, K. D. (2017). Implementation of the Hajj Health Surveillance System. *IKESMA Journal Volume 13 Number 2 September 2017*, 103–115.
- Lasmita, Yuni, Misnaniarti, & Idris, H. (2021). Analysis of Acceptance of Covid-19 Vaccination Among the Community. *Journal of Public Health (Kesmas) Khatulistiwa*, 9(4), 195–204. <https://doi.org/10.29406/jkkm.v8i4.3056>
- Latif, A., Syafar, M., Yusuf, A., & Asmi, A. S. (2021). Analysis of Factors Influencing Compliance of Coffee Shop Visitors to the Covid-19 Health Protocol. *Jurnal Ilmiah Kesehatan Sandi Husada*, 10, 380–389. <https://doi.org/10.35816/jiskh.v10i2.627>
- Law Number 6 of 2018, quarantine. (n.d.).
- Liberty, I. A., Pariyana, P., Roflin, E., & Waris, L. (2018). Determinants of Compliance with Hypertension Treatment in Level I Health Facilities. *Journal of Research and Development of Health Services*, 1(1), 58–65. <https://doi.org/10.22435/jpppk.v1i1.428>
- Minister of Law and Human Rights of the Republic of Indonesia. (2018). Law Number 6 of 2018, quarantine.
- Notoatmodjo, S. (2010). *Health Promotion, Theory and Application*. Rineka Cipta.
- Notoatmodjo, S. (2011). *Public Health, Science and Art*. PT Rineka Cipta.
- Pangesti, Nova A, Purnamaningsih, E. R. (2021). *Journal of Nursing Science*. *Journal of Mental Health Nursing Science*, 4(1), 1689–1699.
- Permatasari, S., Harsanti, A., Gayatri, G., Latief, D. S., & Sunaryo, I. R. (2023). Evaluation of health worker compliance based on quality indicators in providing dental and oral health services in specialist polyclinics: a cross-sectional study. *Padjadjaran Journal of Dental Researchers and Students*, 7(2), 147. <https://doi.org/10.24198/pjdrs.v7i2.40503>
- Postgraduate Directorate of Sari Mutiara University of Indonesia. (2021). *Thesis Writing Guidelines*. Sari Mutiara University of Indonesia.
- Putu Indra, I. A. (2022). The Relationship between the Utilization of Maternal and Child Health Books and Compliance with Complete Basic Immunization in Infants Aged 0-11 Months at the Abiansema IV Health Center.
- Saidah, Hafnidar, Rani, A., & Mawardi. (2023). Determinant Factors That Related to Non-Communicable Diseases in Hajj Pilgrims in Aceh Province. *SEHAT RAKYAT (Public Health Journal)*, 2(1), 99–108. <https://doi.org/10.54259/sehatrakyat.v2i1.1424>

- Secretary General of the Ministry of Health of the Republic of Indonesia. (2013). Technical Guidelines for Health Development of Hajj Pilgrims. Ministry of Health of the Republic of Indonesia.
- State Gazette of the Republic of Indonesia. (2016). [www.peraturan.go.id](http://www.peraturan.go.id)
- Sudirman, A. (2019). Analysis of Factors Related to the Achievement of Health Alert Card Collection for Hajj Pilgrims (K3JH) in East Kotawaringin Regency. Airlangga University Library.
- UI Psychology Writing Team. (2023). Social Psychology (E. A. Meinarno (Ed.); Edition 2). Salemba Humanika.
- Vestabilivy, E. (2021). Health Examination of Hajj Pilgrims in Lumajang Regency. *Jurnal Persada Husada Indonesia*, 8(28), 36–42. <https://doi.org/10.56014/jphi.v8i28.312>
- Wiranti, Sriatmi, A., & Kusumastuti, W. (2020). Determinants of Depok City Community Compliance with the Large-Scale Social Restriction Policy in Preventing COVID-19. *Jurnal Kebijakan Kesehatan Indonesia*, 9. <https://doi.org/>: <https://doi.org/10.22146/jkki.58484>.